

HyperStream

2016-2017 STEM Scale-Up Program

Overview: HyperStream exposes students to technology through hands-on technology projects, competitions, showcases and engaging presentations all combined with the opportunity to work with technology mentors. HyperStream clubs can meet after school or be added into the curriculum.

Grade Levels: 5-12

Program Summary:

To help develop Iowa's future IT workforce, HyperStream connects 5th- to 12th-grade students with industry professionals who expose the students to potential IT careers within Iowa, as well as mentor the students as they complete IT-Related curriculum and projects. The program provides students with access to technology-based education and real-world experiences. HyperStream focuses on five learning tracks rooted in computer science: (Multimedia, Game Design, Cyber Defense, Application Development and Robotics)

Program Objectives and Description:

- To raise awareness of technology careers in all industries across Iowa
- Provide students with the tools and resources to create technology and solve real world challenges
- Provide a program that aligns with 21st century skills, including problem-solving, innovation, teamwork, collaboration, initiative, leadership, adaptability and effective communication
- Increase student participation in post-secondary technology programs including, engineering, computer science and computer engineering

What does the program provide to the educator?

- Project learning modules, curriculum and kits for HyperStream tracks
- Program and curriculum training for educators, including an educator stipend for time and travel (\$170)
- Project mentoring/coaching by technology mentors
- Field trip opportunities and potential internships or scholarships for students
- Travel stipend (\$250 per club) to attend HyperStream competitions or tech-related events
- HyperStream competition in Ames in late April for students in grades 9-12 and spring virtual competition for students in grades 5-8
- Marketing materials for applicants including t-shirts, posters and brochures to promote the program to students and parents

What is required by the educator in order to implement this program?

- HyperStream is offered **FREE** to applicants.
- Applicants must provide an environment with access to computers for project implementation, as well as utilize the provided software.
- Minimum of one educator to serve as liaison and Teacher Champion that will provide communications with HyperStream staff including registrations, student rosters and surveys.
- Applicants are responsible for recruiting students into the program and attending mandatory training.
- Teacher Champion is responsible for attending HyperStream meetings to facilitate the program.
- Teacher Champion(s) attend student competitions/showcases and coordinate travel plans and expenses beyond \$250 travel stipend provided.
- Applicants will be responsible to work in partnership with HyperStream staff in seeking and/or solidifying technology mentors from their local community.
- HyperStream runs from September to May. HyperStream meetings are held at least twice a month.

Website (with link to Standards Alignment): www.hyperstream.org

Program Video: https://www.youtube.com/watch?v=EtpEY_PbRLY